MONTHLY WEATHER REVIEW,

JUNE, 1879.

(General Weather Service of the United States.)

WAR DEPARTMENT,

Affice of the Chief Signal Officen,

TFLEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

In preparing this Review the following data, received up to July 14th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observatious taken at 122 Signal Service stations and 12 Canadian stations, as telegraphed to this office; monthly journals and means 127 and 145 respectively, from the former; reports from 37 Sunset stations; 204 monthly registers from Voluntary Observers; 37 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Services of, the States of Iowa and Missouri; reliable newspaper extracts; special reports.

BAROMETRIC PRESSURE.

Upon chart No. II is shown by the isobaric lines the general distribution of atmospheric pressure, as reduced to sea-level, for the month. The general pressure on the Atlantic and Gulf coasts has been normal or slightly below, while in the interior for the Lakes, Mississippi valley, Tennessee and Ohio valley it has been considerably above the normal, reaching nearly 0.05 above on the Upper Lakes. As might be expected, from the frequency of storm paths traversing it, the Northwest was somewhat below the normal. The Pacific coast averaged nearly 0.04 below.

The Lecal Barometric Ranges have been comparatively small, and have varied as follows: Pacific coast, 0.15 at San Diego to 0.40 at Roseburg, Or, and 0.56 at Red Bluff; Western Plateau, 0.57 at Winnemucca to 0.78 at Salt Lake; Rocky Mountains, 0.45 at Santa Fe to 0.67 at Virginia City; Summit of Pike's Peak, 0.31; Gulf States, 0.24 at Key West to 0.47 at Montgomery, 0.42 at Galveston and 0.58 at Corsicana; Atlantic States, 0.42 at Jacksonville, 0.41 at Cape Lookout, 0.75 at Cape May, 0.77 at Newport and 0.68 at Eastport, and in the interior, 0.55 at Augusta, 0.71 at Lynchburg, 0.88 at Albany; Summit of Mt. Washington, 0.85; Ohio valley and Tennessee, 0.86 at Columbus to 0.52 at Memphis; Lake region, 0.69 at Oswego to 1.07 at Milwaukee and 0.95 at Duluth; Northwest and Eastern Slope of Rocky Mountains, 0.71 at St. Paul to 1.15 at Breckenridge and 0.73 at Deadwood; 1.06 at North Platte, 0.96 at Dodge City and 0.89 at Fort Sill.

Areas of High Barometer.—Of these, four have been sufficiently marked to merit a description.

No. I.—The area described as No. IX in the May Review was central in Minnesota on the morning of the 1st; barometers at Bismarck 30.47, Breckenridge 30.39, or 0.50 above normal at each station—the highest barometer reported during the month. Moving nearly due south it was central over western Kansas on the morning of the 2nd. Its course thence was S-SW., being central in western Texas at midnight. By morning of the 3rd it had passed into Mexico. This area was accompanied by the minima temperatures for the month for the entire Rocky Mountain slope, Missouri and Rio Grande valleys, Western and Eastern Gulf, Tennessee, the western portion of Upper Lakes, Mississippi and Ohio valleys. A minimum temperature of 31° was reported at Pembina the morning of the 1st and at Cheyenne of 32° the 2nd. The maximum temperatures on these dates, of 96° at Boston on the 1st, 103°.5 at Los Angeles, 100° at Sacramento on the 2nd, and 109° at Visalia on the 3rd, in connection with low areas Nos. I and II, are especially noticeable. Frosts, not severe, were reported in Iowa on the 1st and 2nd, and ice an eighth of an inch thick in central Wisconsin on the 2nd, but no damage resulted to crops. The following high winds accompanied this area: On the 1st, Escanaba, 28 miles; Chicago, 26; Milwaukee, 25;